

Final Evaluation Report

| Your Details | |
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| Full Name | Prince Boama |
| Project Title | Overcoming Data Deficiency in Endangered Species: Piloting an Integrated Strategy for Monitoring and Conserving the Pel's Flying Squirrel in Ghana |
| Application ID | 36068-1 |
| Date of this Report | 14/2/2024 |

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| Objective | Not achieved | Partially achieved | Fully achieved | Comments |
|---|--------------|--------------------|----------------|----------|
| Provide a complete set of valuable empirical data on the distribution and population status of <i>Anomalurus pelii</i> | | | | |
| Use ArcGIS and model of maximum entropy (Maxent) software to model effects of land use change on the species' range-wide distribution and identify priority habitats for conservation | | | | |
| Build the capacity and understanding of local people in research, conservation needs and plight and importance of the species | | | | |
| Produce a revised strategy to institute a 10-year conservation and research strategy for <i>Anomalurus pelii</i> | | | | |

2. Describe the three most important outcomes of your project.

- a) This project collected broad baseline data and identified the conservation needs of the Pel's flying squirrel (*Anomalurus pelii*) for the first time in Ghana. We undertook surveys in the species habitat and develop a habitat suitability map for the species. We collected data on the dimensions of hunting and trade of the species. Hunters reported hunting 10-50 individuals of *Anomalurus pelii* in a month although the species population is declining compared to 10 years. Surveys confirmed the presence of the Derby's scaly-tailed squirrel (*Anomalurus derbianus*), dwarf scaly-tailed flying squirrel (*Anomalurus pusillus*) and Beecroft's scaly-tailed squirrel (*Anomalurus beecrofti*) in the Suhuma forest region. We identified a booming bushmeat market which traded in the Pel's flying squirrel and some other threatened species including white-thighed colobus (*Colobus vellerosus*), Lowe's monkey (*Cercopithecus lowei*), Patas monkey (*Erythrocebus patas*), white-bellied pangolin (*Phataginus tricuspis*), black-bellied pangolin (*Phataginus tetradactyla*), and grey parrot (*Psittacus erithacus*).
- b) Through this project, the principal investigator was invited by Dr Rosalind KENNERLEY (Co-chair of SMSG) and now a member of the IUCN Small Mammal Specialist Group (SMSG).
- c) This project educated local people including 1000 schoolchildren and their teachers, for the first time in Ghana about the Pel's flying squirrel.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

We encountered the following difficulties over the project duration:

- i. Hunters were hesitant to be part of surveys and interviews as they initially believed the research team were government officials/media team operating in disguise to investigate their business. The project team had to spend several weeks living with local people in their communities to gain the trust of hunters. We also worked through community leaders to dialog with hunters. We later organised focus group meetings with hunters from project communities to educate them about our project objectives and activities. This extended the survey period.
- ii. Surveys in the market were challenging since the traders who we interviewed concentrated more on going about their business than responding to interview questions. The project team had to wait and spend several hours with traders during each market day in the week to gather data. This also extended the survey period.
- iii. The road network to forest communities was very bad and this hindered us from exploring the proposed adjoining Krokosua Hills forest reserve region. The survey focused only on the Suhuma forest area to reduce costs, especially on vehicle maintenance.
- iv. On several occasions, we had to remount traps on trees due to destruction by wind and other animals. We therefore reduced monitoring times for traps since they were also not yielding data.

4. Describe the involvement of local communities and how they have benefitted from the project.

The project worked with five communities within the Suhuma forest area - Adiembra, Asiekrom, Asamoakrom, Bedii, and Sefwi Aferee. In these communities we engaged community leaders and hunters in focus group meetings to educate them our project, the conservation needs of the Pel's flying squirrel and assessed their perceptions on conservation strategies for the species in the Suhuma forest. We also visited five community schools and educated about 1000 schoolchildren and their teachers. We recruited two undergraduate students and five community volunteers to be part of the project activities; these volunteers were trained and involved in both forest and market surveys. We also engaged bushmeat vendors in the Sefwi Dwenase township which has the biggest market center and thriving bushmeat market in the western North region. We educated traders about the risks of bushmeat trade to public health and biodiversity conservation and assessed their perceptions of alternative livelihoods interventions.

5. Are there any plans to continue this work?

Yes, we have plans to implement recommendations from this pilot project.

6. How do you plan to share the results of your work with others?

We plan to share our technical report with the IUCN Small Mammal Specialist Group. The project leader is now a member of this group and will directly communicate our findings to the group for possible future update for the species status. We will also share our technical report with the Ghana Wildlife Division to step up enforcement of regulations regarding the use of the species in Ghana. We will submit a manuscript for publication using our baseline data.

7. Looking ahead, what do you feel are the important next steps?

Based on our findings, we plan to implement these action plans for the species in the Suhuma forest region:

- i. Undertake surveys to understand the perceptions of bushmeat actors about the risk of hunting, trade, and zoonotic diseases to enhance education and law enforcement.
- ii. Investigate the potential of alternative livelihood programmes to reducing hunting and trading of bushmeat in the area.
- iii. Undertake enrichment planting in degraded habitats of the species in the Suhuma forest reserve.
- iv. Getting timber companies, the Ghana Forestry Commission, and traditional leaders to support a conservation action plan for the species in the Suhuma forest reserve.
- v. Establish an educational club and community voluntary group to sustain educational programmes especially about the closed hunting season in communities.
- vi. Sustain transect surveys and use camera trapping to monitor the species in the forest.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

We mentioned The Rufford Foundation during community focus meetings, survey interviews and education programs. We also used the logo on all project materials including survey questionnaires.

9. Provide a full list of all the members of your team and their role in the project.

Mr. Prince Boama (Team leader): He coordinated all the project activities and assisted with modelling and development of maps.

Miss. Linda Appiah (core Team member): She assisted with education campaigns in schools and development of survey questionnaires.

Mr. Kwaku Afrifa Dwumah (Core Team member): He assisted with forest surveys and education campaigns.

Mr. Isaac Frimpong Arthur (volunteer): He assisted with surveys in the market and interviews with hunters.

Mr. Abo Michael Animah (volunteer): He was the driver during the entire project period and assisted with field surveys.

We also worked with community members who served as local guides and assisted with monitoring of the species the forest (Kwame Nkwa, Nana Prempeh, Yaw Baah, Akwasi Nyarko, Kofi Nsiah).

10. Any other comments?

This pilot project has been an eye opener in terms of collecting conservation science data and implementing a conservation programme. We are grateful to The Rufford Foundation for making this possible.